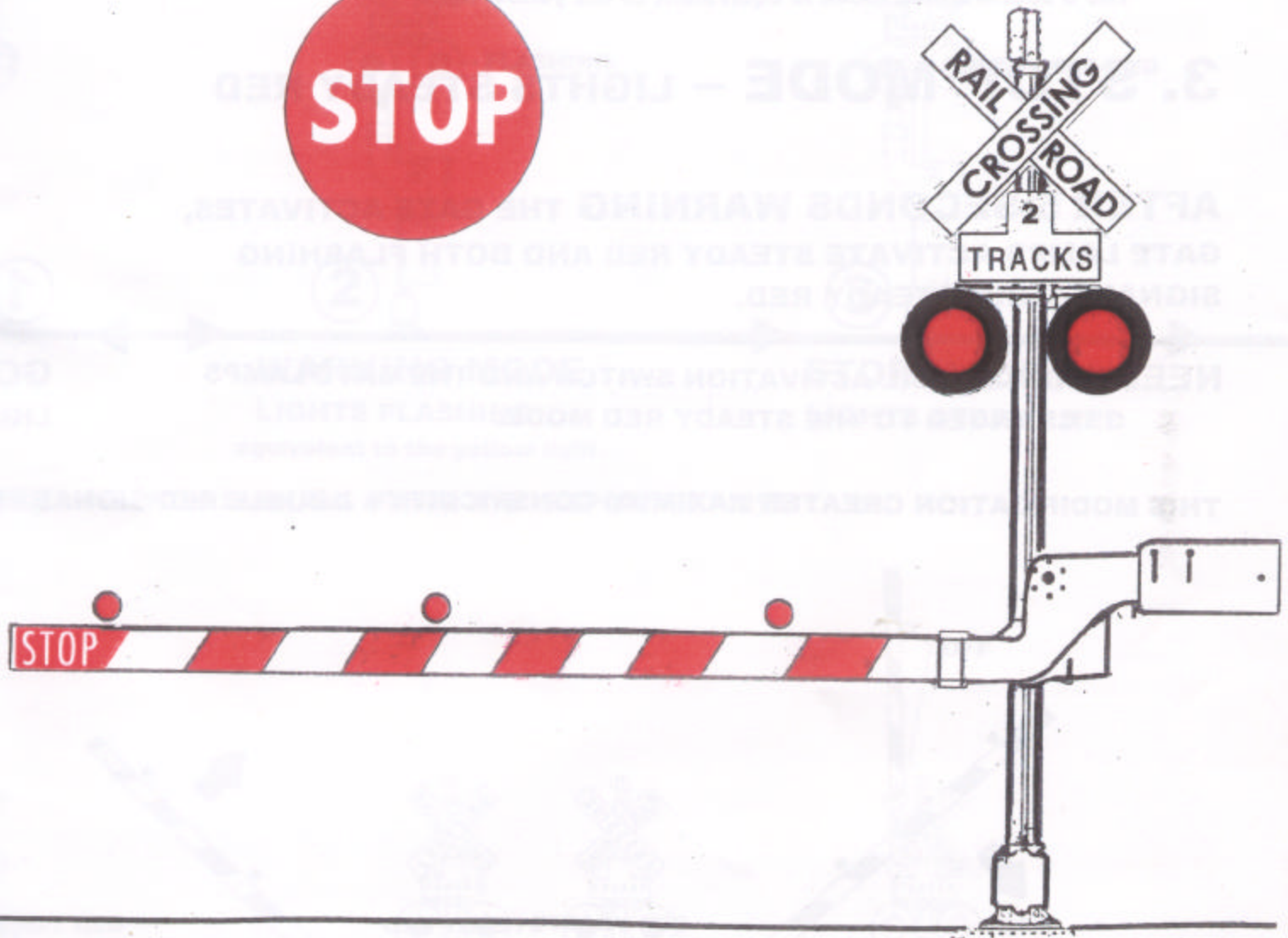


JUST SAY

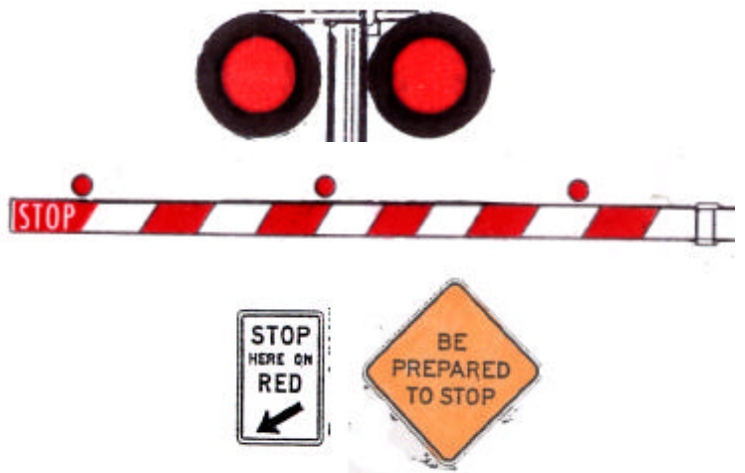


THIS IS A LOW TECH MODIFICATION OF EXISTING RAILROAD CROSSING SIGNALING EQUIPMENT AS IT APPEARS TODAY. BECAUSE MOTOR VEHICLE OPERATION IS A VISUAL ACTIVITY, THE clearest MESSAGE POSSIBLE IS NEEDED FOR MOTORISTS TO MAKE QUICK SAFE DECISIONS. RAILROAD CROSSINGS ARE SERIOUSLY LACKING WHEN IT COMES TO DIRECTING MOTORISTS TO STOP AND STAY STOPPED. THE WORD STOP CANNOT BE FOUND ANYWHERE AT RAILROAD CROSSINGS. THIS DEFICIENCY IS NOT DIFFICULT OR COSTLY TO CORRECT. THIS IMPORTANT "STOP MESSAGE" CAN BE BROUGHT TO A HIGH LEVEL OF VISIBILITY WITH A MINIMUM OF MODIFICATION. COMBINED WITH A LONGER "STOP GATE" THIS MODIFICATION CAN SAVE LIVES.

**TWO (2) GATE RAIL ROAD CROSSINGS
CAN BE MADE AS SAFE OR SAFER
THAN FOUR (4) GATE CROSSINGS FOR
AS LITTLE AS \$8000 PER CROSSING**

“THE STOP MESSAGE MODIFICATION”

- **STOP LIGHTS**
- **STOP GATES**
- **STOP SIGNAGE**



**ADDS A NEW SAFETY DIMENSION TO
RAILROAD CROSSINGS**

JUST SAY



THE “STOP MESSAGE” HAS NEVER BEEN TESTED AT RR CROSSINGS

VISUAL VERSUS AUDIO TRAFFIC CONTROL

TRAFFIC IS CONTROLLED WORLDWIDE BY VISUAL MEANS

	STOP SIGNS / LIGHTS	HORNS
1. CERTIFIED TRAFFIC CONTROL DEVICE	YES	NO
2. COMMON USAGE WORLDWIDE	YES	NO
3. GIVE SPECIFIC INSTRUCTIONS TO MOTORISTS	YES	NO
4. CONSTANTLY INDICATE CONDITIONS	YES	NO
5. WORK FOR HEARING IMPAIRED MOTORISTS*	YES	NO
6. WORK IN ALL WEATHER CONDITIONS	YES	NO
7. MOTORISTS UNDERSTAND THEIR MEANING	YES	NO
8. INCREASE INTERSECTION SAFETY	YES	NO
9. LOW COST INSTALLATION	YES	NO
10. EASY TO INSTALL AND MAINTAIN	YES	NO
11. MASS PRODUCED – READILY AVAILABLE	YES	NO
12. INVENTORIED LOCALLY – NATIONWIDE	YES	NO
13. LOCAL MAINTENANCE IN PLACE NATIONWIDE	YES	NO
14. KNOWN MAINTENANCE COSTS	YES	NO

*** ESTIMATED HEARING IMPAIRED MOTORISTS 3 MILLION**

SIGNIFICANT INCREASES IN SAFETY CANNOT BE ATTAINED BY AUDIO MEANS

RR CROSSING EQUIPMENT NEEDS MODERNIZATION

RR CROSSING EQUIPMENT IS OUT OF DATE FOR MODERN DAY TRAFFIC CONDITIONS AND INSTRUCTIVE SIGNS AND ROAD MARKINGS ARE NEEDED.

RR CROSSINGS DO NOT HAVE ONE OVERT UNIVERSALLY RECOGNIZED STOP INDICATOR, ONLY AMBIGUOUS FLASHING LIGHTS.

RR CROSSINGS ARE THE ONLY TRAFFIC STOP SITUATION WHERE MOTORISTS ARE NOT WARNED OF A “STOP AHEAD” POSSIBILITY.

TRAFFIC CONTROL EQUIPMENT IS A CONSUMER PRODUCT, BUT THE CONSUMER IS NOT TAKEN INTO CONSIDERATION.

HEARING IMPAIRED MOTORISTS ARE IGNORED ENTIRELY. (ADA)

CURRENT FRA RECOMMENDED IMPROVEMENTS ARE NOT TRAFFIC CONTROL EQUIPMENT. THEY ARE BARRIERS, WARNINGS AND SURVEILLANCE DEVICES. THESE SOLUTIONS ARE UNACCEPTABLE TO CONSUMERS OF TRAFFIC DIRECTIVES WHOSE LIVES DEPEND ON THEIR MAKING QUICK CORRECT DECISIONS.

AGENCY REGULATORS ARE UNRESPONSIVE TO CHANGING MOTOR SAFETY NEEDS AND CITE OBSOLETE AND INFLEXIBLE RULES TO JUSTIFY INACTION.

THERE IS NO LACK OF IMPROVEMENT POSSIBILITIES.

BECAUSE MOTOR VEHICLE OPERATION IS A VISUAL ACTIVITY, THE CLEARST MESSAGE POSSIBLE IS NECESSARY TO MAKE QUICK AND SAFE DECISIONS. RR CROSSINGS ARE SERIOUSLY LACKING WHEN IT COMES TO DIRECTING MOTORISTS TO STOP AND STAY STOPPED. THE WORD STOP CANNOT BE FOUND AT RR CROSSINGS. THIS DEFICIENCY IS NOT DIFFICULT TO CORRECT. THE “STOP MESSAGE” CAN BE BROUGHT TO A HIGH LEVEL OF VISIBILITY WITH A MINIMUM OF MODIFICATION AND AT AN AFFORDABLE COST.

Two Gate Crossing

EQUIPMENT NEEDS RE-EVALUATION

EQUIPMENT

- FLASHING LIGHTS
- GATE ARM
- gate lights

ENVIRONMENT

- ## ● RR CROSSING SIGNS

EDUCATION

- stop**

ENFORCEMENT

- enforce laws**

EQUIPMENT

BARRIERS, WARNING LIGHTS

ENVIRONMENT

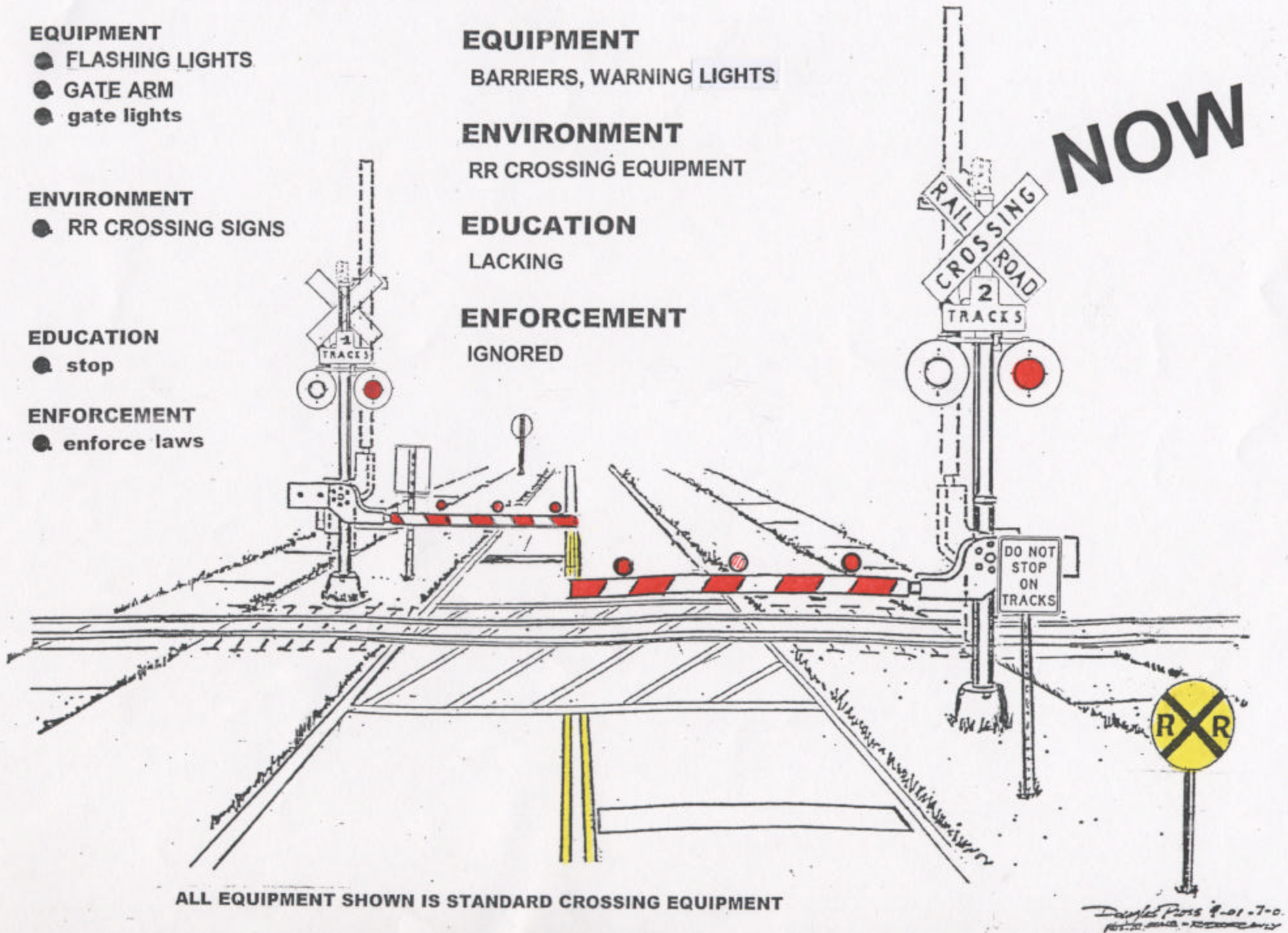
RR CROSSING EQUIPMENT

EDUCATION

LACKING

ENFORCEMENT

IGNORED



ALL EQUIPMENT SHOWN IS STANDARD CROSSING EQUIPMENT

Douglas Pass 9-01-70.
 POT. IN. SEAS. = 120000000

WHY ?

(DO YOU KNOW THE ANSWERS?)

- 1. WHY HAVE TRAINS HISTORICALLY BLOWN HORNS?
(Clue: to frighten dumb animals off the tracks)**
- 2. WHY ARE FLASHING SIGNALS AT RR CROSSINGS?**
- 3. WHY ARE GATES NEEDED AT RR CROSSINGS?**
- 4. WHY ARE RR RIGHT OF WAYS NOT TREATED LIKE THRU STREETS
SINCE TRAINS NEVER YIELD TO CROSS TRAFFIC?**
- 5. WHY ARE GATES NOT USED AT HIGHWAY INTERSECTIONS?**
- 6. WHY DO SCHOOL BUSES AND HAZARDOUS MATERIAL VEHICLES
ALWAYS HAVE TO STOP AT RR CROSSINGS?**
- 7. WHY DON'T SEMI AND HAZARDOUS MATERIAL VEHICLES
HAVE TO BLOW THEIR HORNS AT HIGHWAY INTERSECTIONS?**
- 8. WHY ARE 60% OF RR CROSSINGS ACCIDENTS DUE TO THE MOTOR
VEHICLE HITTING THE TRAIN?**
- 9. WHY ARE RR CROSSINGS THE ONLY INTERSECTION WHERE
HORNS ARE USED TO INFLUENCE MOTORIST BEHAVIOR?**
- 10. WHY IS THE SAFETY OF HEARING IMPAIRED MOTORISTS
OVERLOOKED AT RR CROSSINGS? (ADA)**
- 11. WHY ARE RR CROSSINGS THE ONLY INTERSECTIONS THAT
DO NOT USE UNIVERSALLY RECOGNIZED STOP INDICATORS TO
BRING TRAFFIC TO A HALT?**
- 12. WHY DO THESE INCONSISTENT CONDITIONS CONTINUE?**

¹¹ EFFECTIVE TRAFFIC CONTROL devices--properly positioned and operational signs, signals and pavement markings--are one of the critical elements that ensure the safe and efficient operations of our streets and highways. In today's era of driver distraction and the controversy over cell-phone usage in the car, effective traffic control devices are more important than ever.

Traffic control devices provide the driver with guidance and instruction on how to safely and most effectively use the road. Uniformity of size, color and shape also provide a consistent message to road users that they can expect to see the same traffic control application anywhere in the United States. Additionally, uniformity provides manufacturers of traffic control devices with consistent design standards. ¹²

MUTCD 2000

JUST SAY STOP

MODIFIED 2 GATE CROSSING

EQUIPMENT

1. modified signal – steady red
2. longer gate – $\frac{3}{4}$ gate
3. gate lights – steady red
4. gate tip – stop sign

ENVIRONMENT

5. road marking – arrow
6. crossing sign – stop here
7. stop ahead warning

EDUCATION

8. stop for red lights

ENFORCEMENT

9. enforce red light laws

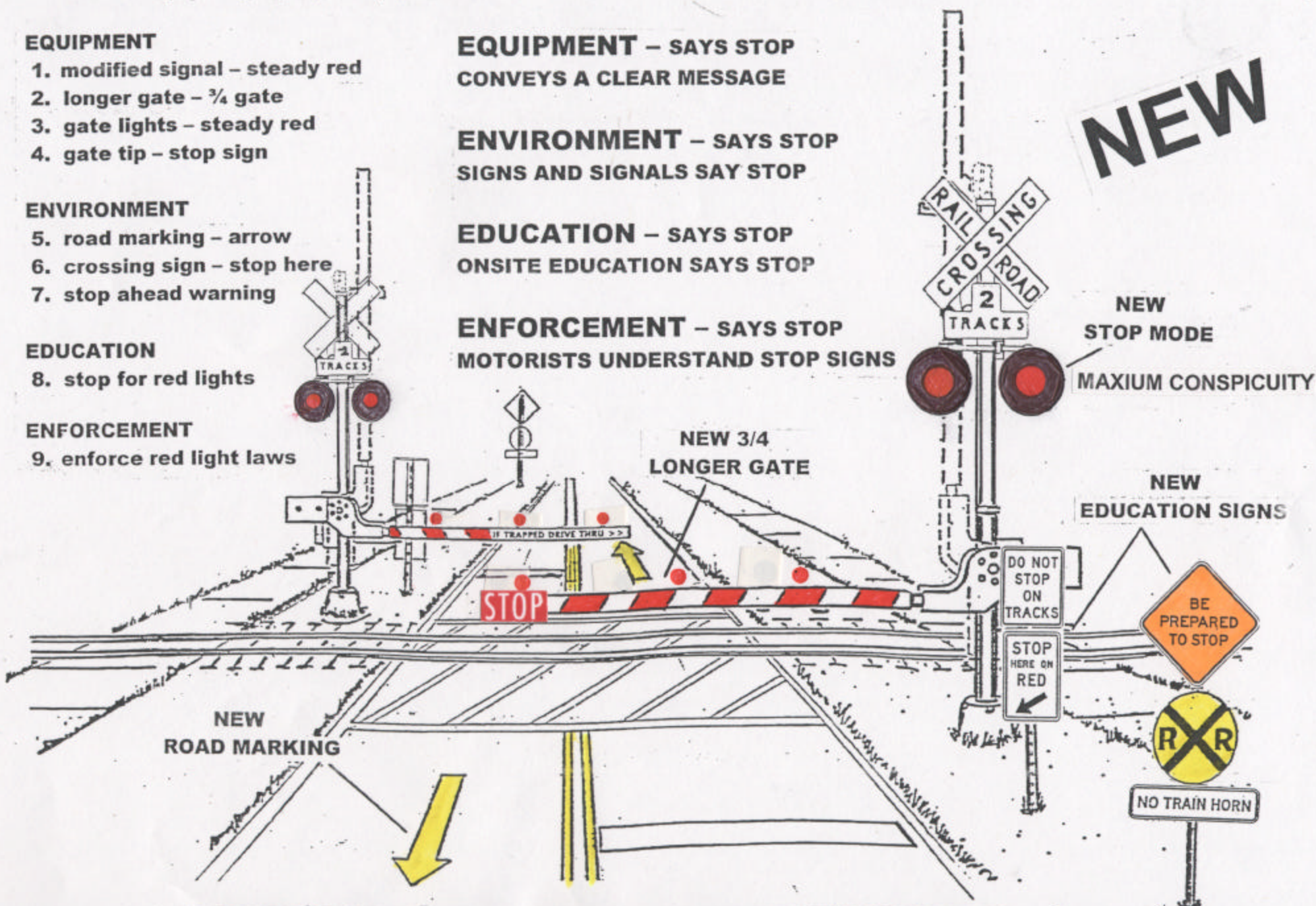
EQUIPMENT – SAYS STOP
CONVEYS A CLEAR MESSAGE

ENVIRONMENT – SAYS STOP
SIGNS AND SIGNALS SAY STOP

EDUCATION – SAYS STOP
ONSITE EDUCATION SAYS STOP

ENFORCEMENT – SAYS STOP
MOTORISTS UNDERSTAND STOP SIGNS

NEW



ALL EQUIPMENT SHOWN IS STANDARD CROSSING EQUIPMENT WITH MODIFICATIONS

Don't Press 9-01-7-0.
R.R. and - R.R. ONLY

HOW IT WORKS

JUST SAY STOP MODIFIED 2 GATE CROSSING

SIGNAL AND GATE MODIFICATIONS USING THE EXISTING INPLACE EQUIPMENT

**COMBINING THE NEW STOP MODE WITH THE LONGER GATE
SHOULD MAKE THE 2 GATES 98% AS EFFECTIVE AS 4 GATES.**

- 1. A NEW FLASHING SIGNAL SWITCH WILL LET THE SIGNAL LIGHTS FLASH FOR 5 SECONDS IN THE WARNING MODE AND THEN SWITCH BOTH LIGHTS TO THE STEADY RED STOP MODE.**
 - A. The 5 sec. warning mode is equivalent to the yellow light.**
 - B. The signal steady red mode, the gate and the steady red gate lamps all activate at same time to create the complete stop mode.**
- 2. THE 3 GATE LAMPS CAN BE SET IN THE STEADY RED MODE TO ACTIVATE SIMULTANEOUSLY WITH THE GATE AND THE SIGNAL STEADY RED MODE. (After the 5 sec. FLASHING WARNING MODE.)**
- 3. WHEN THE TRAIN EXITS, THE GATE GOES UP JUST AS IT DOES NOW AND ALL LIGHTS TURN OFF INDICATING THE GO MODE.**
- 4. THE LONGER $\frac{3}{4}$ GATE GOES $\frac{3}{4}$ OF THE WAY ACROSS THE ROAD (1/2 WAY INTO THE ONCOMING LANE) See the North Carolina DOT test results which indicate the $\frac{3}{4}$ gate is 98% as effective as 4 gates.**
- 5. THE REFLECTIVE STOP DECAL ON THE GATE TIP IS A LOCAL PURCHASE ITEM.**
- 6. THE DIRECTIONAL ARROW AND SIGNS ARE STANDARD STOCK ITEMS.**

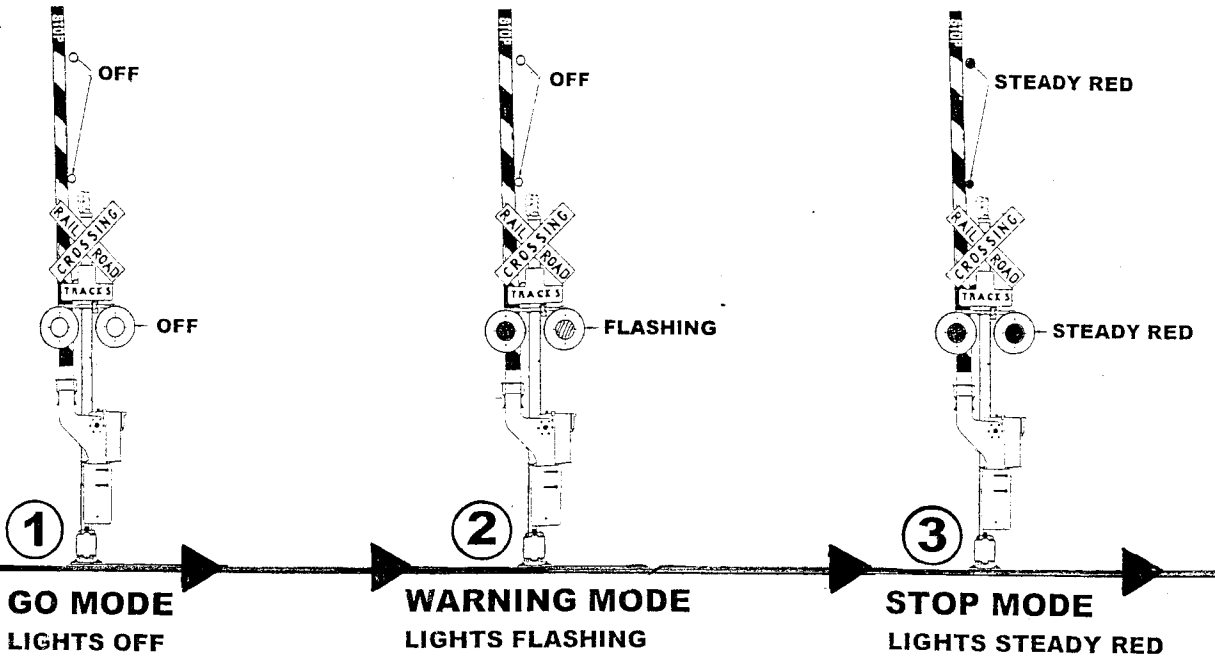
**THIS "STOP MESSAGE" MODIFICATION CREATES MAXIMUM
CONSPICUITY AND WILL FURTHER ENHANCE 4 QUAD GATE SAFETY.**

THE SIGNAL SEQUENCE

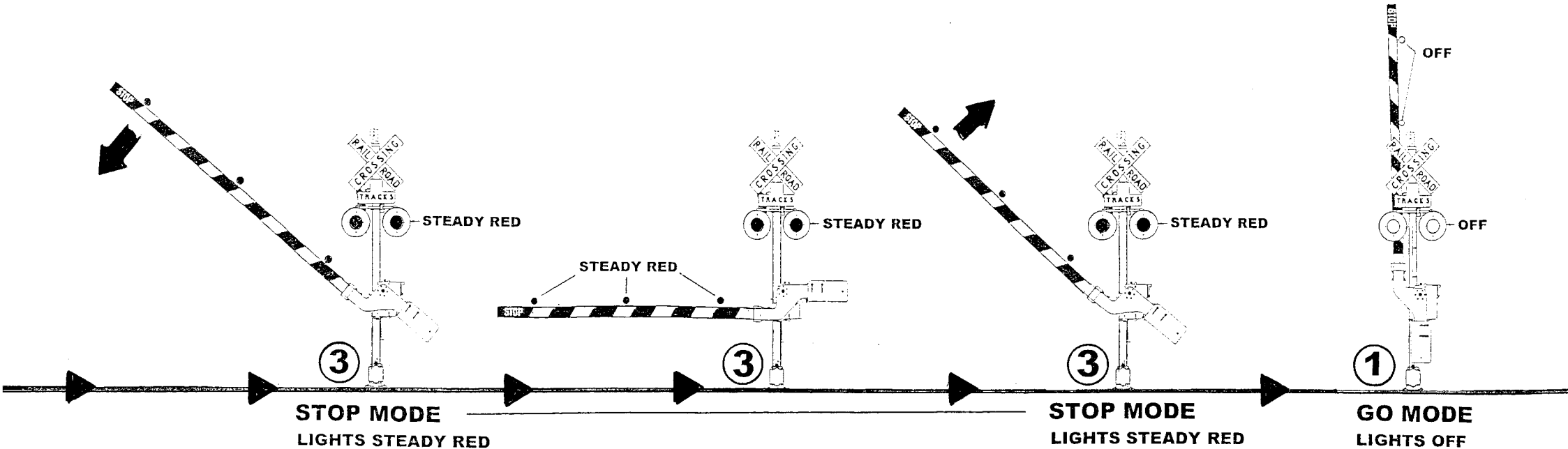
- 1.GO MODE – LIGHTS OFF
- 2. WARNING MODE – LIGHTS FLASHING
- 3. STOP MODE – LIGHTS STEADY RED

AFTER 5 SECONDS WARNING THE GATE ACTIVATES, GATE LAMPS ACTIVATE STEADY RED AND BOTH FLASHING SIGNALS TURN STEADY RED.

NEED : NEW SIGNAL ACTIVATION SWITCH AND THE GATE LAMPS CHANGED TO THE STEADY RED MODE.



THIS MODIFICATION CREATES MAXIMUM CONSPICUITY : DOUBLE RED SIGNAL BACKPLATES 12 INCH SIGNALS /FHWA /ITE REPORT IR - 115



NCDOT LONGER GATE TEST RESULTS

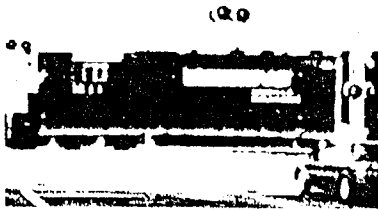
include:

Four-Quadrant Gates

Adding two extra gates to existing signals and gates blocks all lanes of travel across the railroad tracks when the signals are activated. During initial tests at the Sugar Creek Road crossing, the use of four-quadrant gates resulted in a reduction in violations of nearly 86 percent.

2 GATES

Longer Gate Arms



Tests at the Orr Road crossing in Charlotte were conducted to evaluate the effectiveness of longer gate arms on reducing drivers' ability to "run around" the gates. These longer gate arms cover 3/4 of the roadway. Tests at Orr Road have shown an 84-percent reduction of crossing violations.

Longer gate arms are used in conjunction with median separators where a separator can be placed on one side of a crossing but not on the other because of a street or driveway connection in close proximity to the crossing.

JUST SAY STOP

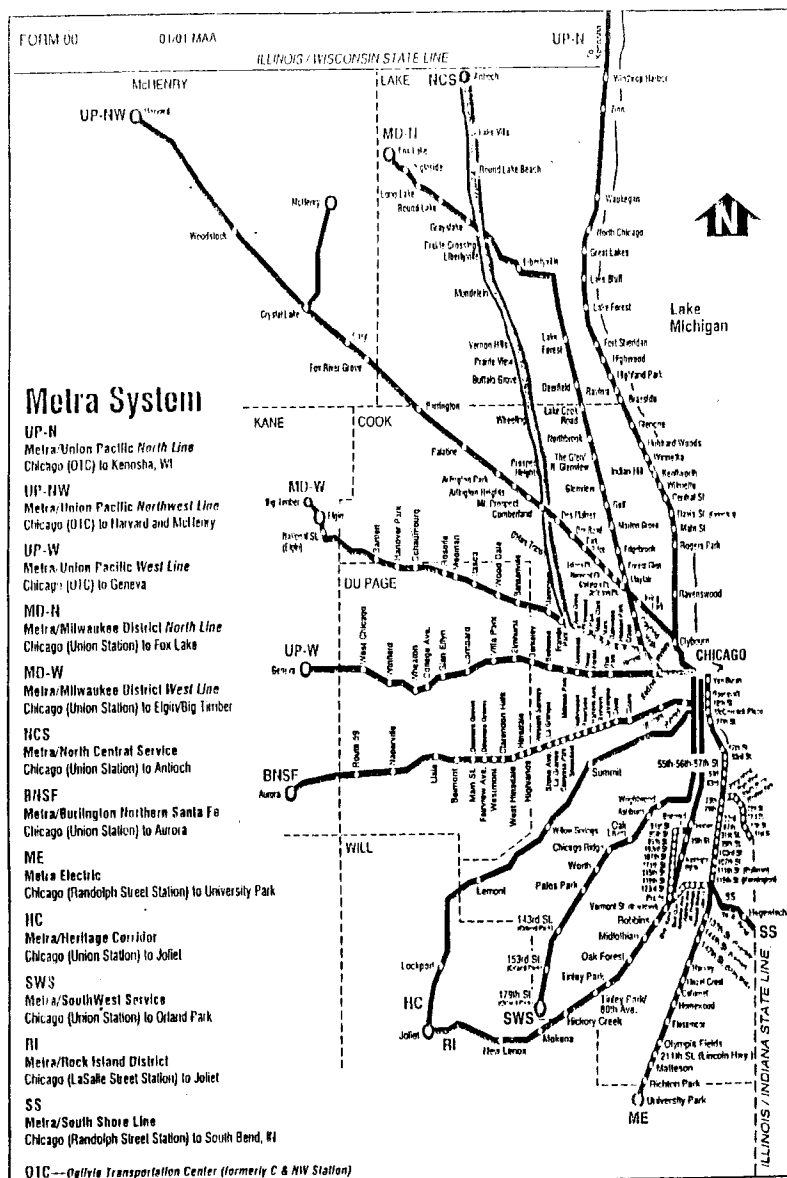
2 GATE MODIFICATION

PARTS LIST

FLASHING/STEADY RED SIGNAL RELAY SWITCH	2100.00	
2 GATE ARM EXTENSIONS	600.00@	1200.00
2 GATE WEIGHTS	100.00@	200.00
REWIRE GATE LAMPS TO STEADY RED	LABOR	
2 REFLECTIVE STOP DECALS	20.00@	40.00
2 STOP HERE ON RED SIGNS	BY VILLAGE	
2 BE PREPARED TO STOP SIGNS	"	
2 ROAD DIRECTIONAL ARROWS	"	
LABOR AND OVERHEAD	3000.00/DAY	4500.00
	TOTAL COST	8040.00

THIS COULD BE \$8000. TO \$10,000. DEPENDING ON THE CROSSING.

LANNY F. WILSON, M.D.
CHAIRMAN
DUPAGE RAILROAD SAFETY COUNCIL



VILLAGE OF ANTIOCH

Taso Maravelas, Mayor

874 Main Street, Antioch, Illinois 60002

T: 847-395-1000 F: 847-395-1920

E: vlqclerk@antioch-il.org

W: <http://www.antioch-il.org>

SAFER CROSSINGS